

DEPARTMENT OF TECHNICAL EDUCATION  
**DIPLOMA IN LIBRARY SCIENCE AND INFORMATION MANAGEMENT**

**FIRST SEMESTER**

Course Title: Basics of Information & Communication Technology	Course Code: <b>15LB13T</b>
Type of course: <b>Theory</b> <b>CIE-25 MARKS</b>	Total Contact Hours: <b>52</b> <b>SEE-100 MARKS</b>

**COURSE OBJECTIVES:**

1. Use of personal computer system for various tasks in libraries.
2. Recognise the significance of computers and networks in the creation, Collection, consolidation and communication of information
3. Learn how network operates (LAN, WAN, MAN)
4. Learn how computer process information
5. Know the essential requirements in any library software's and the general Features of library software.

UNIT NOS	CONTENTS	NO. OF HRS.
1.	Introduction to Computers	10
2.	Computer Hardware	10
3.	Computer Software	10
4.	Computer Networks	08
5.	Introduction to ICT	06
6.	Application of computers in library activities and Services	08
	Test /Seminar/Guest Lecture	

**DETAILS OF CONTENT**

<b>UNIT 1</b>	
<b>INTRODUCTION TO COMPUTERS</b>	10
Evolution and generation of computers, Elements of computer System, Types of Computers, Role of Computers in Data processing Cycle. Trends and issues in the development of Computers.	
<b>UNIT 2</b>	
<b>COMPUTER HARDWARE</b>	10
Hardware: Introduction, Input and Output devices, Processer, Memory Storage Devices, Development in hardware components.	

<b>UNIT 3</b>		
<b>COMPUTER SOFTWARE</b>		<b>08</b>
Software: Introduction, Kinds, programming Languages, Viruses and Remedies, Development in Software components.		
<b>UNIT 4</b>		
<b>COMPUTER NETWORKS</b>		<b>08</b>
Networks: Meaning and Definition, Components of Networks, Types And Topologies of Networks.		
<b>UNIT 5</b>		
<b>INTRODUCTION TO ICT</b>		<b>06</b>
ICT: Meaning, Definition, Impact of ICT on Society, Library and Information Services, Role of professionals in ICT.		
<b>UNIT 6</b>		
<b>APPLICATION OF COMPUTERS IN LIBRARY ACTIVITIES AND SERVICES</b>		<b>08</b>
Library Software and their features: Koha, E-Granthalaya, SOUL LIBSOFT, Requirement of Library Software.		

**COURSE OUTCOME:** By the end of this programme the student will know

1. Basic concept of Computer
2. Computer Hardware
3. Computer Software
4. Computer networks
5. Introduction to ICT
6. Application of computers for library activities and services

## MAPPING

1. Course outcomes with program outcomes and specification table with hours and distribution of marks with cognitive level

Course outcomes	Mapped PO	Teaching Hours	Distribution of Theory Marks as per Cognitive levels			Total marks
			R	U	A	
1	1,2,5,7,8	10	10	5	10	25
2	1,2,3,4,5,8	10	10	5	5	20
3	1,2,3,4,5,8	10	10	10	5	25
4	1,3,4,5,8,7,9,10	08	10	5	10	25
5	1,2,3,4,5,8,9	06	10	5	10	25
6	1,2,3,4,5, 8,10	08	10	10	5	25

R=Remember; U=Understanding A=Application

## 2. Course with program outcomes Level mapping

Name of the course	Program Outcomes									
	1	2	3	4	5	6	7	8	9	10
Basics of Information Communication Technology	3	3	3	3	3	1	1	3	1	1

**Level 3- Highly Addressed, Level 2-Moderately Addressed, Level 1-Low Addressed.**

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

If  $\geq 40\%$  of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3

If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2

If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1

If  $< 5\%$  of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

## COURSE ASSESSMENT AND EVALUATION

	What		To Whom	Frequency	Max Marks		Evidence Collected	Course Outcomes
					Theory	Practical's		
DIRECT ASSESSMENT	CIE- Continuous Internal Assessment	I A Tests	Students	<b>Theory:</b> Three IA tests for theory (Average marks of three IA tests are considered)	20		Blue Books	1 to 6
		Class room Assignments		Class room Assignments	05		Log of activity	1
				<b>TOTAL</b>	25			
	SEE- Semester End Examination	End Exam		End Of the Course	100		Answer Scripts	ALL CO's
	Student Feedback on course			Students	Middle Of The Course	Feed Back Forms		
End of Course Survey		End Of The Course	Questionnaire					

**Note:** I.A. test shall be conducted for 20 marks. Average marks of three tests shall be rounded off to the next higher digit.

**Note to IA verifier:** The following documents to be verified by CIE verifier at the end of semester

1. Blue books (20 marks)
2. Student suggested activities report for 5 marks
3. Student feedback on courses regarding Effectiveness of Delivery of instructions & Assessment Methods

**Question for CIE and SEE will be designed to evaluate the various educational components, such as:-**

Remembering and understanding	: 40% weightage
Applying the knowledge acquired from the course	: 35% weightage
Analysis	: 25% weightage

## MODEL OF RUBRICS/CRITERIA FOR ASSESSING STUDENT ACTIVITY

RUBRICS FOR ACTIVITY (5 marks)						
Dimension	Unsatisfactory 1	Developing 2	Satisfactory 3	Good 4	Exemplary 5	Student Score
<b>Collection of data</b>	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collect much information; but very limited relate to the topic	Collects some basic information; most refer to the topic	Collects a great deal of information; all refer to the topic	Ex: 4
<b>Fulfil team's roles &amp; duties</b>	Does not perform any duties assigned to the team role	Performs very little duties but unreliable	Performs very little duties	Performs nearly all duties	Performs all duties of assigned team roles	5
<b>Shares work equally</b>	Always relies on others to do the work	Rarely does the assigned work; often needs reminding	Usually does the assigned work; rarely needs reminding	Normally does the assigned work	Always does the assigned work without having to be reminded	3
<b>Listen to other Team mates</b>	Is always talking; never allows anyone else to speak	Usually does most of the talking; rarely allows others to speak	Talks good; but never show interest in listening others	Listens, but sometimes talk too much	Listens and speaks a fair amount	2
Average / Total marks=(4+5+3+2)/4=14/4=3.5=4						

**Note: This is only an example. Appropriate rubrics/criteria may be devised by the concerned faculty (Course Coordinator) for assessing the given activity.**

## FORMAT OF IA TEST QUESTION PAPER (CIE)

Test/Date and Time	Semester/year	Course/Course Code	Max Marks		
Ex: I test/6 <sup>th</sup> weak of sem 10-11 Am	I SEM	Basics of Information & Communication Technology	20		
	Year: II	Course code: <b>15LB-13T</b>			
Name of Course coordinator : CO's: _____			Units: __		
Question no	Question	MARKS	CL	CO	PO
1					
2					
3					
4					

**Note: Internal choice may be given in each CO at the same cognitive level (CL).**

## REFERENCES:

1. Kent. 10 Minutes guide to the Internet. PHI New Delhi.
2. Sehgal. Information Technology for Librarians. Ess Ess New Delhi.
3. Raman Nair. R. Internet for Information Management Services.
4. Satyanarayana.R. Information Technology and its Facets. New Delhi.
5. Basandra,S.K. computers Today. New Delhi: Golgotia,2002.
6. A librarian guide to Internet:Searching and Evaluating Information, Jeanne Froidevaux muller Chandas Publishing , 2005,221pages,ISBN 1843340569, Rs 995

## MODEL QUESTION PAPER

Time: 3 Hours.

Max. Marks: 100.

Instructions: 1. Question paper consists of two parts.

2. Answer any SIX questions from a set of 9 questions in the PART A.

3. Answer any SEVEN questions from a set of 10 questions in the PART B.

### PART A

1. Define ICT. List the components of I C T.
2. Define computer. List the Basic components of computers.
3. Define Hardware. Write the meaning of the term computer processor.
4. What is Storage Devices.
5. Write the meaning of the term A L U.
6. Define Software. List the different kinds of Software.
7. Define Networking. What is ROUTER and MODEM.
8. Write a short note on Virus and Antivirus.
9. What are Miniature Storage Devices.

### PART B.

1. Explain the impact of ICT on Library and Information service activities.
2. Write a note on generations of computers/ Evolution with examples.
3. Explain any two Primary and Secondary Storage Devices.
4. Explain in brief the following terms: Keyboard, Plotter, RAM, Speaker.

5. Explain the generations of Programming Language.
6. Discuss the trends in computers Hardware and Software.
7. Explain the general features of Library Software.
8. List the Topologies of Network. Explain any three of them.
9. Write a note on Programming Languages.
10. Explain the trends in developments of components of computers.

## **MODEL QUESTION BANK**

### **PART A**

1. Write the meaning and definition of the term I C T.
2. List the components of I C T.
3. Define computer. List the basic components of computers.
4. What are the different types of computers. Mention any two types.
5. What is Hardware.
6. List the various Input and Output Devices.
7. Explain the following in brief. Keyboard and Plotter.
8. Explain the following in brief. RAM and SPEAKER.
9. Define Software. List the kinds of Software.
10. Write in brief the developments in software components.
11. Define Networking.
12. What is ROUTER.
13. What is MODEM.
14. List the Topologies of Networking.
15. What is WWW.
16. What is Internet.
17. What is Library software list any 4 Library software.

### **PART B**

1. Write in detail the impact of Information communication Technology on the society.
2. Discuss the role of Professionals in I C T .
3. Explain in detail the generations of computers with examples.
4. Explains in details the role of computers in Data processing Cycle.
5. Discuss the trends and issues in the developments of computer.
6. Explain the role of Processor, and memory storage devices.
7. Discuss in detail the development in Hardware components of computers.
8. Explain in brief the different kinds of software.

9. Discuss the problem of Viruses and recommended remedies available.
10. Explain the generations of Programming Languages.
11. List the Network Topologies. Explain with the help of diagram any three of them.
12. Explain the meaning of Networking. What re ROUTER and MODEM.
13. Define library software. Explain the features of Library Software
14. Discuss in detail the requirements of library software.